

are transferable. M. von Linstow thinks that this opinion is correct if we understand thereby that a state of encystation is always necessary before a *Distomum* can be developed freely in the intestine. If a free *Cercaria* reaches its definitive host, it may continue to live there, but it becomes encysted.—*Archiv für Naturg.* 1873, p. 1; *Bibl. Univ.* August 15, 1873, *Bull. Sci.* p. 328.

Manufactured Glassrope. By Dr. J. E. GRAY, F.R.S. &c.

There have lately been sold at a natural-history sale two or three specimens of the glassrope (*Hyalonema*) from Japan of an extraordinary thickness, made up of a very large number of siliceous fibrous spicules, which at the free end diverge in the most extraordinary manner into a bunch six or seven inches wide. The size, and especially the fibres being separated from each other and twisted in different directions, so that the spiral turns did not match each other, excited my suspicions, which were confirmed by the mass of black pitchy matter with which their base was covered.

The larger specimen was made to appear the most perfect, and was about four inches in circumference about three inches from the base. This part, above the black pitchy substance, is covered with the usual bark for about two or three inches height. When this animal coat or so-called bark was carefully examined, it was found to have no real connexion with the spicules, and to be made up of pieces of bark taken from other specimens and fixed across the bunch of filaments, the grooves between the pieces looking like wrinkles. These specimens are evidently made for sale, probably by the same French taxidermist that made the specimens formerly noticed.

I am sorry to say they found purchasers at prices which the separate glassy filaments of which they are composed would not have fetched. The larger specimens have a usual-sized specimen, partly denuded of its bark, attached by a black pitchy substance to its base.

Note on certain Species of Phasmidæ hitherto referred to the Genus Bacillus. By JAMES WOOD-MASON, of Queen's College, Oxford.

The discovery which I have to announce, viz. that the true males of *Bacillus insignis* and its allies are to be sought in insects of the type of *Lonchodes stilpnus*, Westw., *Lonchodes pseudoporus*, Westw., *Lonchodes Russellii*, Bates, &c., affords another instructive illustration not only of the extreme imperfection of our knowledge of this family of Orthopterous insects, but also of the utter futility of any attempt satisfactorily to distribute the species composing it into genera, until we shall be in possession of the true pairs of many more of the described species.

In 1869 M. Henri de Saussure* proposed, prematurely as it turns out, to divide the genus *Bacillus* into three subgenera—one (*Bacillus*) for the reception of *B. Rossii* and its allies, another (*Ramulus*) for *B. humilis*, Westw., *B. carinulatus*, Sauss., &c., and a third (*Baculum*) for *B. cunicularis*, Westw., *B. ramosus*, Sauss., &c.; and in the first part of my memoir on the *Phasmidæ* †, I provisionally referred to

* Mém. Orth. fasc. ii. pp. 111 & 112.

† Journ. A. S. B. 1873, pt. ii. no. 1.

the last-named subgenus one known and three new species, pointing out that these agreed together in having the last dorsal abdominal segment longitudinally grooved, and mentioning, in the description of each species, the presence, in the posterior border of this segment, of an emargination filled by a well-developed supraanal plate, which is invariably to be found in the females of all species of *Lonchodes*. I have long felt convinced that the insect of which a description is appended was the male of my *Bacillus* (*Baculum*) *insignis*, but have thought it better to wait for evidence confirmatory of the fact. This has at length reached me from Ceylon, thanks to Mr. Hugh Nevill, C.C.C., who has been kind enough to send me, amongst other species of great interest and value, the two sexes of an insect agreeing admirably with M. de Saussure's* description of *L. pseudoporos*, Westw.

The discovery of the male of *B. insignis* will obviously also necessitate the transference of the following species to the genus *Lonchodes*:—*Bacillus cunicularis* et *hyphereon*, West.; *B. patellifer* et *scytale*, Bates; *B. ramosus*, Sauss., *B. Penthesilea* et *furcillatus*, Wood-Mas.: and I strongly suspect that *B. Woodwardi* et *scabriusculus* will eventually have to follow them to the same genus.

Lonchodes insignis.

♀. *Bacillus* (*Baculum*) *insignis*, Wood-Mason, Journ. A. S. B. vol. xlii. 1873, pp. 51 & 52, pl. v. figs. 1 & 2.

♂. Body of excessive tenuity. Antennæ perfectly filiform, 24-jointed, reaching nearly to the apex of the anterior femora. The head is almost a complete miniature of that of the female, and, in the specimen from which the dimensions given below are taken, has two minute tubercles between the eyes, representing the well-developed horns of the opposite sex. Three dark dorsal streaks, one median and two lateral, pass along the whole length of the body from the head to the end of the sixth abdominal segment. Both meso- and metathorax are dilated at either end, but especially at the insertion of the legs, and have each a raised median dorsal carina. The six basal abdominal segments are slightly expanded at each end, as in spirit specimens of the female; the seventh and eighth are shorter than the preceding, subequal, and gradually widen, the former from the base to the apex, the latter from the apex to the base; the last is scarcely longer than these, and cleft for rather more than a third of its length, but the sides of the cleft are so closely approximated that no hiatus is visible as in many other species; seen from the side, this segment terminates in an obtuse, scarcely deflexed tip. The legs are devoid of all traces of the foliaceous lobes so conspicuous in the female, but present the same general structure; the intermediate femora are just perceptibly curved; and the four posterior tibiæ have a few inconspicuous spinules towards the apical end.

Total length 4 in. $7\frac{1}{2}$ lin., ant. $15\frac{1}{2}$, head 2, proth. $1\frac{3}{4}$, mesoth. 12, metath. 11, abd. $24+6=30$ lin., ant. legs $19+22+6\frac{1}{2}=4$ in., inter. legs $12+12+5=2$ in. 5 lin., post. legs $15+16+4\frac{1}{2}=3$ in.

Hab. Samagooting, Naga Hills, with the female. Collected by Captain Butler.—*Proceedings of the Asiatic Society of Bengal*, July 1873.

* *Op. cit.* pp. 120 & 121.